

HOLLER et al
Serial No. 09/332,050

Atty Dkt: 2466-29
Art Unit: 2665

REMARKS/ARGUMENTS

Favorable reexamination of the captioned application is respectfully requested.

Claims 1-11 and 13-52 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 6,081,525 to Christie. Claim 12 stands rejected under 35 USC §103(a) as being unpatentable over U.S. Patent 6,081,525 to Christie and U.S. Patent 5,828,844 to Civanlar as applied to claim 36 above and further in view of U.S. Patent 5,425,295 to Nakagaki. All prior art rejections are respectfully traversed.

Applicants' independent claims utilizes switched (signaled) virtual connections which are established on-demand, e.g., as the need arises and on a call-by-call basis. Such on-demand capability requires signalling across a bearer services network (e.g., the ATM network, wherein the VCI/VPI is selected as part of the signalling scheme).

To establish the switched virtual connection, two example methods are disclosed and made the subject of various claims. One of the example methods involves returning the exit port address or identifier (i.e., a selected mux and logical port on the mux) to the incoming mux and then establishing the switched virtual connection using ATM signaling. Another of the example methods involves forwarding the entry mux identification and logical port to the remote exit mux and establishing the switched virtual connection "backwards".

In accordance with either example method, signalling (such as ATM signaling) is used to establish the switched virtual connection and typically N-ISUP signalling, in parallel, to convey (among other call related information) the mux specific information (e.g., address).

The foregoing concepts are evident in existing independent claims:

HOLLER et al
Serial No. 09/332,050

Atty Dkt: 2466-29
Art Unit: 2665

Claim 1

the STM connection being used for returning an address of the exit port to the entry port, or for forwarding an address of the entry port to the exit port, whereby the call can be switched directly through the ATM network

Claim 4

the STM connection being used for returning the address of the exit port to the entry port, or forwarding an address of the entry port to the exit port, whereby the entry port can direct voice traffic directly to the exit port only using the ATM switching in the ATM network.

Claim 14

the emulated connection being used for sending information to the bearer services network entry port so that a physical connection can be established through the bearer services network

Claim 24

...a virtual connection provided to the narrowband switches, the logical unit also returning over the virtual connection, to a bearer services network entry port, information so that a physical connection can be established through the bearer services network.

Claim 36

...the emulated connection being used for sending information to the bearer services network entry port so that a physical connection can be established through the bearer services network.

HOLLER et al
Serial No. 09/332,050

Atty Dkt: 2466-29
Art Unit: 2665

Claim 38

a logic unit, connected to the narrowband node, which emulates and controls resources required by a narrowband call setup procedure and which sets up a virtual connection in the call services domain, but which uses the ATM network rather than the virtual connection to establish a physical connection for voice transport in the bearer services domain.

Applicants' use of switched virtual connections (instead of permanent virtual connections [PVCs]) requires Applicants to have the means to forward the necessary ATM signalling destination information to the correspondent end in "returning an address of the exit port to the entry port, or for forwarding an address of the entry port to the exit port" (*see, e.g., independent claim 1*). Such is necessary by the on-demand capabilities facilitated by Applicants. Note also Applicants' dependent claim 3, which refers to "means for establishing a new switched connection through the ATM network for each new telephone call by using ATM signalling".

By contrast, U.S. Patent 6,081,525 to Christie relies on provisioned/permanent virtual connections [PVCs] between the muxes, not switched virtual connections. In Christie, an incoming non-ATM call (e.g. from PSTN or a Local Exchange) is mapped on an already existing PVC (i.e. a specific VCI/VPI value and physical link out from the mux). The selection of which PVC is determined by the "signaling processor" (250)¹. Christie refers to "signalling processor to select the virtual connection", i.e. indicating that the virtual connection already exists (which is the only situation Christie mentions throughout the description).

¹ Multiple signalling processors are possible according to Christie, but not more than two maximum for any particular call. This latter "feature" has scalability problems.

HOLLER et al
Serial No. 09/332,050

Atty Dkt: 2466-29
Art Unit: 2665

Thus, Christie uses only one signaling scheme across both systems; Applicants employ bearer services signaling for connection establishment with call control signaling as an overlay. Moreover, Applicants have switched virtual connection which are not taught or suggested by U.S. Patent 6,081,525 to Christie.

C. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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